Docket No. 1448.1042

Serial No.: 10/629,897

IN THE SPECIFICATION:

Please **REPLACE** lines 19-20 of page 3, with the following:

Fig. 6 is an example of sequence information on a sequence of an unknown gene (reference element 551 indicates the sequence (Sequence A) which is SEQUENCE ID S1);

Please **REPLACE** lines 21-22 of page 3, with the following:

Fig. 7 is an example of sequence information on a sequence of a known genome (reference element 552 indicates the sequence (Sequence B) which is SEQUENCE ID S2);

Please **REPLACE** lines 23-24 of page 3, with the following:

Fig. 8 is an example of comparison between the sequences of the known genome and the unknown gene (wherein a portion of the sequence of the known genome (Sequence B) in Fig. 7, listed as the sequence on line 1 in Fig. 8, is SEQUENCE ID S3; the next portion of Sequence B, listed on alternate lines 3, 5, 7, 9, 11, 13, 15, 17, 19 and 21 of the remaining sequence lines of Fig. 8, is SEQUENCE ID S4; a portion of Sequence A, shown on lines 4, 6, 8, 10, 12, 14, 16, 18, 20 and 22, reference element 802, is SEQUENCE ID S5; and a portion of Sequence A not matched by Sequence B (a last 56 nucleotide bases in Sequence A that are not matched in Sequence B) is SEQUENCE ID S6;

Please **REPLACE** the paragraph beginning at page 11, line 9, through line 16, page 11, with the following:

---These steps will be explained below in detail. Fig. 6 is an example of information of the sequence A read at Step S501, wherein reference element 551 indicates the sequence (Sequence A) which is SEQUENCE ID S1. The information of the sequence A may be entered via the network 310 or a storage medium. In another method, it may be entered directly using the keyboard 311. In an alternative method, the scanner 313 having an OCR function may be employed to enter the information of the sequence A as image information, which is then converted into text data.---

Please REPLACE the paragraph beginning at line 17, page 11, through line 3, page 12,

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with the following:

--- Fig. 7 is an example of information of the sequence B onto which the sequence A is mapped at Step S502, wherein reference element 552 indicates the sequence (Sequence B) which is SEQUENCE ID S2. Fig. 8 is an example of comparison between the sequence B and the sequence A, and the comparison indicates the result of homology searching of the sequence A, that is, similar regions in the sequence B shown in Fig. 7, wherein a portion of the sequence of the known genome (Sequence B) in Fig. 7, listed as the sequence on line 1 in Fig. 8, is SEQUENCE ID S3; the next portion of Sequence B, listed on alternate lines 3, 5, 7, 9, 11, 13, 15, 17, 19 and 21 of the remaining sequence lines of Fig. 8, is SEQUENCE ID S4; a portion of Sequence A, shown on lines 4, 6, 8, 10, 12, 14, 16, 18, 20 and 22, reference element 802, is SEQUENCE ID S5; and a portion of Sequence A not matched by Sequence B (a last 56 nucleotide bases in Sequence A that are not matched in Sequence B) is SEQUENCE ID S6. In other words, the comparison shown in Fig. 8 indicates the result of mapping at Step S502. The relation between the sequence A and the sequence B are required as follows: 1) the sequence A is mostly mapped onto the sequence B; 2) a gap 801 may be present in the sequence A which has been mapped onto the sequence B; and 3) if the sequence A has the gap 801, each fragment of the sequence A divided by the gap 801 is mapped onto the sequence B in the order of appearance.---